

REMARKS

Please reconsider the application in view of the following remarks.

The Information Disclosure Statement

Applicants note with appreciation the Examiner's thorough consideration of the references cited in the Information Disclosure Statement submitted on September 28, 2006 and November 29, 2006.

Specification Objections

In the Office Action, the Examiner indicated that the title of the application is not descriptive. Applicants propose the following amended title for the Examiner's consideration.

"POWER SUPPLY DEVICE HAVING STABLE OUTPUT VOLTAGE"

Claim Rejections - 35 U.S.C. § 102

The Examiner has rejected claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by Juutilainen (U.S. 4,577,267). Applicants respectfully traverse.

Independent claim 1

In order for a reference to anticipate an invention, the reference must teach each and every element of the claimed invention.

Claim 1 calls for ... *a DC voltage reduction means for stepping down the DC output from the rectification circuit, wherein said voltage reduction means is a non-insulation type DC/DC converter*

For example, as noted on page 7, lines 10-12 of the present specification, "[...] the three-phase AC voltage generated from the power generator 1 is rectified and, then, **the rectified voltage is dropped to, for example, 40 V by the down converter 3.**" Also, as noted on page 7, lines 17-19, "Fig. 2 is a view illustrating the basic circuit structure of the down converter 3. The down converter 3 is a non-insulating type converter **including no transformer.**"

On page 2, item 4, the Examiner contends that Juutilainen discloses "a DC voltage reduction means (c, d, e, f, and g) for stepping down the DC output from the rectification circuit, wherein said voltage reduction means is a non-insulation type DC/DC converter (c and d). [See Figs. 2 and 5]." Applicants respectfully **disagree** with the Examiner.

As illustrated in Fig. 2 of Juutilainen, elements (c) and (d) are **current switching circuit and voltage switching circuit**, respectively. As noted in column 3, lines 4-15 of Juutilainen, element "c" is a **current-switching unit** whose operation alternates with a following On-OFF voltage-switching unit "d" in such a manner that, when voltage-switching unit "d" is switched OFF, the input-signal current runs through current-switching circuit "c". **In other words**, as illustrated in Fig. 5, when the input signal potential across capacitor 12 is insufficient to turn on transistor 40, the **current-switching unit** effectively diverts the current to flow through resistors 14 and 18 and the emitter-collector circuit of transistor so as to provide providing an alternate or artificial load for the field signal source so that it is not short-circuited. *See also column 4, first full paragraph of Juutilainen.*

As to element (d), when **voltage-switching circuit "d"** is switched ON (i.e., when the input signal across capacitor 12 is above the **predetermined threshold**), the current running

through current-switching unit "c" is disconnected and current starts to flow through resistors 28 and 34, thereby increasing the base voltage of transistor 32, turning it on so that current increases through resistor 30, thereby **elevating the base voltage of transistor 40 to conduction**, and providing current to transistor 48 **to operate oscillator block "e" [(e) drives transformer (f)]**. This is how to eliminate the effect of an input signal source impedance on the switching event of the ON-OFF voltage-switching unit "d". This ensures a controlled switch-on (as well as switch-off) regardless of external connections. *See column 3, lines 4-15 and also column 4 of Juutilainen.*

In contrast, the DC/DC converter recited in claim 1 **steps down** the DC output voltage from the rectifier circuit and DC/DC converter is non-insulation type having no transformer.

As noted above, in order for a reference to anticipate an invention, the reference must teach each and every element of the claimed invention. Since Juutilainen does not disclose at least the aforesaid element of the claimed invention, Applicants submit that the rejection of claims 1 - 3 is improper and respectfully request that it be withdrawn.

Dependent claim 2

Claim 2 calls for ... *a switching means for performing duty control on said non-insulation type DC/DC converter; and a switching-means driving circuit which maintains said switching means at an ON state until the AC output voltage from said AC power generator exceeds a predetermined value and starts the duty control with said switching means at the time when said AC output voltage exceeds the predetermined value.*

Although the Examiner has not addressed dependent claim 2, Applicants point out to the Examiner that the switching means (b, c, d) in Juutilainen, as discussed above in claim 1, performs duty control on the transformer (e, f) as discussed above and NOT on the non-insulation type DC/DC converter which does not include a transformer. *See also Fig. 5.*

Therefore, Applicants assert that Juutilainen fails to disclose *a switching means for performing duty control on said non-insulation type DC/DC converter; and a switching-means driving circuit which maintains said switching means at an ON state until the AC output voltage from said AC power generator exceeds a predetermined value and starts the duty control with said switching means at the time when said AC output voltage exceeds the predetermined value.* Therefore, dependent claim 2 is not anticipated.

The Claims have been shown to be allowable over the prior art. Applicants believe that this paper is responsive to each and every ground of rejection cited in the Office Action dated **August 13, 2008**, and respectfully request favorable action in this application. The Examiner is invited to telephone the undersigned, applicants' attorney of record, to facilitate advancement of the present application.

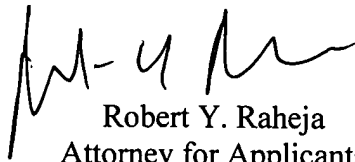
Application No.: 10/594,628
Art Unit: 2838

Amendment under 37 CFR §1.111
Attorney Docket No.: 063048

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read 'R. Y. Raheja', is written over the printed name.

Robert Y. Raheja
Attorney for Applicants
Registration No. 59,274
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

RYR/bam